SOUTH FLORIDA WATER MANAGEMENT DISTRICT (SFWMD) WATER RESOURCES ADVISORY COMMISSION (WRAC) LAKE OKEECHOBEE COMMITTEE MEETING – June 28, 2006

Indian River Community College, Wolf Technology Center 2400 SE Salerno Road, Stuart, FL 9:00 a.m. – 3:45 p.m.
MEETING REPORT

This is a summary of the June 28 WRAC Lake Okeechobee Committee meeting.

INTRODUCTION:

- Committee Chair Malcolm "Bubba" Wade called the meeting to order and welcomed everyone.
- Agenda Changes: Added updates after Item 2:
 - Water Conditions;
 - Lake Water Quality; and,
 - Water Supply Policy Implications of Lake Regulation Schedule Revisions
- Presentations:
 - o Agricultural "Best Management Practices"
 - Stormwater Treatment Area 3-4 Design and Operations
- The lake water level was 12.01' on 6/28/06.
- Lake Okeechobee Committee presentations will be posted to http://my.sfwmd.gov/wrac,
 Lake Okeechobee tab.

ISSUES/DISCUSSION BY COMMITTEE:

- Member Issues:
 - Status of lake regulation schedule revisions and July 11-13, Corps of Engineers' public workshops on the "Tentatively Selected Plan".
- Water Conditions Summary (Cal Neidrauer, SFWMD):
 - Update about the status of lake water levels.
 - The 6/28/06 lake level 12.01' is 1' above the "Supply Side Management" zone and the lake is dropping naturally due to low rainfall.
 - Committee questions and discussion included :
 - Chance of a managed recession next year; capacity in the Upper Kissimmee basin; need to maintain salinity at a rolling average of 10 parts/thousand (ppt). Salinities are averaging 9.1 ppt so need to maintain essential flows.
 - Recent analysis indicates (to member commenting) that the annual climate cycle is more responsible for the increased inflows to the lake during September-December, than flows from the Upper Kissimmee Basin. Can SFWMD incorporate

- "net level rise" data in the period of record to account for this?
- Response: Yes, but with caveats because of the limitations imposed by the data analyzed (historic vs. more recent data).
- SFWMD will post a Climate White Paper by August 15, 2006.
- Climate Prediction Center forecast data is used to help inform decisions about lake releases.
- Previous lake regulation schedule had no flexibility and would likely have prevented the continuation of pulse releases to help meet Caloosahatchee Minimum Flow and Level requirements.

• Lake Water Quality Update (Susan Gray and Kim O'Dell, SFWMD):

- Water clarity has improved. Total Suspended Solids (TSS) are down to 30 parts/million and Total Phosphorous is down to 185 parts/billion from 385-400 ppb.
- o There continues to be re-suspension of sediments and starting to see some blue-green algal blooms.
- Data on macro invertebrates is very bad. Fisheries are in very bad shape with little or no recruitment occurring so far this year.
- Prior to the 2004 hurricanes, TSS were 20 ppt, in-lake phosphorous was at 120 ppb. What can be done to get back to those levels?
- Will update Committee on changes recommended for the Lake Okeechobee Protection Plan at next meeting. But there will be a challenge to meet the "Total Maximum Daily Loads" for the lake by 2015 (current target).
- Committee questions and discussion included: Phosphorous concentrations in C-23, C-24 and C-25 canals; need to reevaluate the lake regulation schedule when the C-44 reservoir comes on line.
- Corps of Engineers selected a "Tentatively Selected Plan" and posted it to the Corps website today. SFWMD is evaluating impacts. Corps will hold public meetings, July 11 in Clewiston, July 12 Ft. Myers and July 13, Stuart. Corps expects to approve a new Water Control Plan in September, 2006.
- Reevaluate the Lake Okeechobee Protection Plan for reducing phosphorus loads. Need to look at enhanced "BMPs", and public/private partnerships for water storage and chemical treatment. Quantify costs and reduction efficiencies.
- Agencies need to coordinate aquatic weed control activities to ensure nutrient and turbidity reduction goals are not defeated by spraying activities.
- Look at what can be done through revamped Lake Okeechobee Protection Plan with available funding.

- Blue-Green algae samples and microcystis toxins.
- Reevaluate discharge point for water from the C-44 reservoir.
 Connect it all the way to the Upper St. Johns River system (historic flows).
- Protect Seminole Tribe water rights under the Water Compact.
 Revive the "Part II Hendry county Plan" to connect to the C-139 basin.

Water Supply Policy Implications of Lake Okeechobee Water Regulation Schedule Revisions – Update (Scott Burns, SFWMD):

- First in series of WRAC Issues Workshops held June 12. Intent is to identify water supply policy issues from Lake Okeechobee Regulation Schedule revisions, discuss with stakeholders, convey to WRAC, SFWMD Governing Board, and forward pumps design team.
- Determine impacts on consumptive uses; meet 1-in-10 year level of service as required by state law. Tools include forward pumps and BMPs. Renewal of Lake Okeechobee Service Area Consumptive Use Permits next year will also enable reevaluation of new criteria.
- Ouestions and discussion included: Reevaluation of Lake Okeechobee MFLs; impacts of regulatory releases for water supply and Caloosahatchee MFL needs; endangered species; reduction of per capita use of water in urban areas; 550 mgd discharged to tide as source to meet future growth; possible routing more lake water south to meet water supply needs; encourage utilities to work together to meet projected future demand with alternative water sources vs. continued reliance on natural system; and possible recharge of canals using reuse water.

• DRAFT Recommendations Paper and next meetings:

- Committee agreed to cancel the scheduled July 26 meeting, and instead hold a two day meeting in Orlando, August 30-31, to review committee comments on the Draft Recommendations paper.
- Members also agreed that comments should be made by Goal,
 Objective and Strategy letter or number. Member comments
 must be provided to Rick Smith not later than <u>Close of</u>
 <u>Business July 25, 2006.</u> <u>Compiled comments will be sent to</u>
 members on August 16, 2006.

• Committee members also agreed that:

- Comments should critique the Goals, Objectives and Strategies. It is not necessary to wordsmith each part of the paper.
- Comments proposing substantial reorganization of the paper will be taken up first at the August meeting. Intent is to get agreement on Goals, Objectives, and Strategies.

 Staff will check on holding August meeting at same location as "Farms to Fuel" Conference (Omni/Champion's Gate, Orlando).

• Summary of Public Comment:

- News of blue-green algal blooms on the lake is not good news for estuaries.
- Need to carefully evaluate phosphorous load impacts from any connection of C-44 back to lake, and any further diversion of flows for consumptive uses. Need an STA to treat Everglades Agricultural Area water.
- Does the total 63,000 acres of Stormwater Treatment Area (STA) capacity hold up given Lake Okeechobee phosphorous concentrations of146 ppb?
- Agricultural "Best Management Practices" "BMPs" (Rich Buddell, Deputy Director, Office of Agricultural Water Policy, FDACS):
 - The FDACS Agriculture BMP Rule applied to four priority Lake Okeechobee Basins. Proposed changes expand rule coverage to all Lake Okeechobee basins. All landowners must now do site specific conservation plans. Schedule for full implementation is now 2009. Even with that it will be difficult to meet the 2015 requirement for "Total Maximum Daily Load" compliance.
 - Questions and discussion included: need for "edge of farm treatment" (to supplement new BMP requirements) vs. new fertilizer application rates and implementation of BMPs to keep soil out of the water. Concerns about "legacy phosphorous" and whether current practices would prevent further buildup of "legacy phosphorous". Urban BMPs will be implemented through the Lake Okeechobee and Estuary Recovery Plan (LOER).
- Stormwater Treatment Area 3-4 presentation (Tracey Piccone, SFWMD):
 - The Florida Everglades Forever Act of 1994 set interim "P" discharge limits from the Everglades Agricultural Area (EAA) to the Everglades Protection Area (EPA) at 50 parts per billion (ppb). The 43,000 acres of STAs built and operated by the SFWMD were achieving from 14-50 ppb. The Act also assumed a 20% reduction from the implementation of BMPs, which did not occur. The 2003 amendments to the Act updated the 1994 requirements, requiring optimization and enhancements to the Stormwater Treatment Areas.
 - Questions and discussion included: Appropriate sizing and operation of the STAs, increased flows to STAs from Chapter 298 drainage districts, downstream needs of the Everglades, and other features (e.g. CERP projects) that will be added over the next 3 or 4 years. Additional modeling to look at need for more conveyance

and treatment capacity; other options such as storage in Lakebelt region; need presentation on 2003-2005 runoff, STA treatment capacity with STA 3-4 and STA-1W online, etc. Look at more storage north of lake. Hurricanes of 2004-05 damaged the STAs. Repairs, re-plantings and enhancements are being completed now.